

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

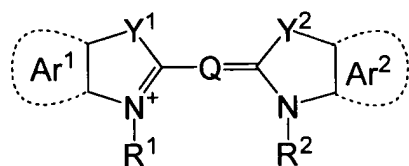
LISTING OF CLAIMS:

1. (canceled.)
2. (currently amended): An image forming material comprising a support and an image forming layer which is laminated on the support and contains at least (A) a water-insoluble and alkali-soluble high-molecular compound and (B) a compound having a structure represented by the following general formula (1) and having an absorption maximum at a wavelength in a range of 760 nm to 1,200 nm:

General formula (1): X^-M^+

wherein in the general formula (1), X^- represents an anion containing at least one ~~substituent having an alkali-dissociating proton carboxyl group~~; and M^+ represents a counter cation which is an atomic group having an absorption maximum at a wavelength in a range of 760 nm to 1,200 nm and is represented by the following general formula (A):

General formula (A)



wherein in the general formula (A), R¹ and R² each independently represents an alkyl group having from 1 to 4 carbon atoms, which may have a substituent selected from an alkoxy group, an aryl group, an amide group, an alkoxycarbonyl group, a hydroxyl group, a sulfo group, and a

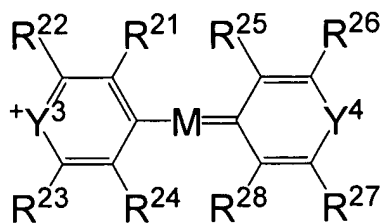
carboxyl group; Y^1 and Y^2 each independently represents an oxygen atom, a sulfur atom, a selenium atom, a dialkylmethylene group, or $-\text{CH}=\text{CH}-$; Ar^1 and Ar^2 each independently represents an aromatic hydrocarbon group, which may have a substituent selected from an alkyl group, an alkoxy group, a halogen atom, and an alkoxycarbonyl group, and may fuse an aromatic ring together with Y^1 or Y^2 and two carbon atoms adjacent thereto; and Q represents a polymethine group selected from a trimethine group, a pentamethine group, a heptamethine group, a nonamethine group, or an undecamethine group, and wherein the image forming material is a positive-type image recording material whose alkali solubility is increased by infrared exposure.

3. (currently amended): An image forming material comprising a support and an image forming layer which is laminated on the support and contains at least (A) a water-insoluble and alkali-soluble high-molecular compound and (B) a compound having a structure represented by the following general formula (1) and having an absorption maximum at a wavelength in a range of 760 nm to 1,200 nm:

General formula (1): X^-M^+

wherein in the general formula (1), X^- represents an anion containing at least one-substituent ~~having an alkali-dissociating proton~~ carboxyl group; and M^+ represents a counter cation which is an atomic group having an absorption maximum at a wavelength in a range of 760 nm to 1,200 nm and is represented by the following general formula (C):

General formula (C)



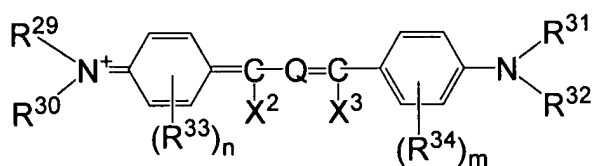
wherein in the general formula (C), Y^3 and Y^4 each independently represents an oxygen atom, a sulfur atom, a selenium atom, or a tellurium atom; M represents a methine chain having at least five or more conjugated carbon atoms; and R^{21} to R^{24} and R^{25} to R^{28} each independently represents a hydrogen atom, a halogen atom, a cyano group, an alkyl group, an aryl group, an alkenyl group, an alkynyl group, a carbonyl group, a thio group, a sulfonyl group, a sulfinyl group, an oxy group, or an amino group, and
wherein the image forming material is a positive-type image recording material whose alkali solubility is increased by infrared exposure.

4. (currently amended): An image forming material comprising a support and an image forming layer which is laminated on the support and contains at least (A) a water-insoluble and alkali-soluble high-molecular compound and (B) a compound having a structure represented by the following general formula (1) and having an absorption maximum at a wavelength in a range of 760 nm to 1,200 nm:

General formula (1): X^-M^+

wherein in the general formula (1), X^- represents an anion containing at least one ~~substituent having an alkali-dissociating proton carboxyl group~~; and M^+ represents a counter cation which is an atomic group having an absorption maximum at a wavelength in a range of 760 nm to 1,200 nm and is represented by the following general formula (D):

General formula (D)



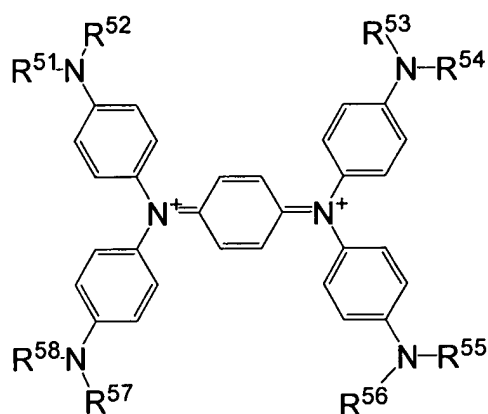
wherein in the general formula (D), R^{29} to R^{32} each independently represents a hydrogen atom, an alkyl group, or an aryl group; R^{33} and R^{34} each independently represents an alkyl group, a substituted oxy group, or a halogen atom; n and m each independently represents an integer from 0 to 4; R^{29} and R^{30} , or R^{31} and R^{32} may bond to form a ring; at least one of R^{29} and R^{30} may bond with R^{33} to form a ring; at least one of R^{31} and R^{32} may bond with R^{34} to form a ring; in the case when a plural number of R^{33} or R^{34} are present, the plurality of R^{33} or the plurality of R^{34} may bond with each other to form a ring; X^2 and X^3 each independently represents a hydrogen atom, an alkyl group, or an aryl group; and Q represents an optionally substituted trimethine group or pentamethine group and may form a ring structure together with a divalent organic group, and wherein the image forming material is a positive-type image recording material whose alkali solubility is increased by infrared exposure.

5. (currently amended): An image forming material comprising a support and an image forming layer which is laminated on the support and contains at least (A) a water-insoluble and alkali-soluble high-molecular compound and (B) a compound having a structure represented by the following general formula (1) and having an absorption maximum at a wavelength in a range of 760 nm to 1,200 nm:

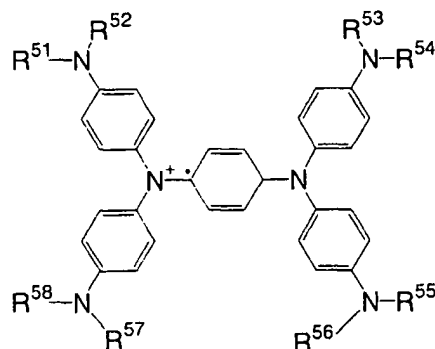
General formula (1): X^-M^+

wherein in the general formula (1), X^- represents an anion containing at least one ~~substituent~~
~~having an alkali-dissociating proton~~ carboxyl group; and M^+ represents a counter cation which is
an atomic group having an absorption maximum at a wavelength in a range of 760 nm to 1,200
nm and is represented by the following general formula (F-1) or (F-2):

General formula (F-1)



General formula (F-2)



wherein in the general formula (F-1) and (F-2), R^{51} to R^{58} each independently represents a
hydrogen atom, an optionally substituted alkyl group, or an optionally substituted aryl group, and

wherein the image forming material is a positive-type image recording material whose alkali solubility is increased by infrared exposure.

6. (canceled).

7. (currently amended): The image forming material according to claims 2, 3, 4 or 5, wherein the compound having a structure represented by general formula (1) is an onium salt represented by the following general formula (1-A):

General formula (1-A): $R^A-SO_3^-M^+$

wherein in the general formula (1-A), R^A represents a substituent containing at least one ~~substituent having an alkali-dissociating proton carboxyl group; the substituent having an alkali-dissociating proton is synonymous with the substituent having an alkali-dissociating proton in the general formula (1);~~ and M^+ is synonymous with M^+ in the general formula (1).

8. (currently amended): The image forming material according to claims 2, 3, 4 or 5, wherein the compound having a structure represented by general formula (1) is an onium salt represented by the following general formula (1-B):

General formula (1-B): $Ar^B-SO_3^-M^+$

wherein in the general formula (1-B), Ar^B represents an aryl group containing at least one ~~substituent having an alkali-dissociating proton carboxyl group; the substituent having an alkali-dissociating proton is synonymous with the substituent having an alkali-dissociating proton in the general formula (1);~~ and M^+ is synonymous with M^+ in the general formula (1).

9. (previously presented): The image forming material according to claims 2, 3, 4 or 5, wherein the image forming layer further contains (C) a light-heat converting agent.

10. (previously presented): The image forming material according to claims 2, 3, 4 or 5, wherein the image forming material is a planographic printing plate precursor.

11. (currently amended): An image forming material comprising a support and an image forming layer which is laminated on the support and contains at least (A) a water-insoluble and alkali-soluble high-molecular compound, (C) a light-heat converting agent, and (D) an onium salt represented by the following general formula (2):

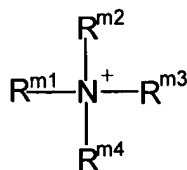
General formula (2): $X^-M_1^+$

wherein in the general formula (2), X^- represents an anion containing at least one ~~substituent having an alkali-dissociating proton carboxyl group~~; and M_1^+ is quaternary ammonium, and the image forming material is a positive-type image recording material whose alkali solubility is increased by infrared exposure.

12. (canceled).

13. (previously presented): The image forming material according to claim 11, wherein the quaternary ammonium has a structure represented by the following general formula (M):

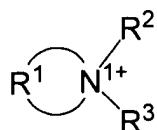
General formula (M)



wherein in the general formula (M), R^{m1} to R^{m4} each independently represents a substituent having one or more carbon atoms and may bond with each other to form a ring structure.

14. (previously presented): The image forming material according to claim 11, wherein the quaternary ammonium has a structure represented by the following general formula (M-1):

General formula (M-1)



wherein in the general formula (M-1), R^1 represents a residue forming a ring structure containing an N^1 atom; R^2 and R^3 each independently represents an organic group and may bond with each other to form a ring structure; and at least one of R^2 and R^3 may be bonded to R^1 to form a ring structure.

15. (canceled).

16. (currently amended): The image forming material according to claim 11, wherein the onium salt represented by the general formula (2) is an onium salt represented by the following general formula (2-A):

General formula (2-A): $R^A\text{-SO}_3\text{-M}_1^+$

wherein in the general formula (2-A), R^A represents a substituent containing at least one ~~substituent having an alkali-dissociating proton~~ carboxyl group; ~~the substituent having an alkali-dissociating proton is synonymous with the substituent having an alkali-dissociating proton in~~ the general formula (2); and M_1^+ is synonymous with M_1^+ in the general formula (2).

17. (currently amended): The image forming material according to claim 11, wherein the onium salt represented by general formula (2) is an onium salt represented by the following general formula (2-B):

General formula (2-B): $\text{Ar}^{\text{B}}\text{-SO}_3^-\text{M}_1^+$

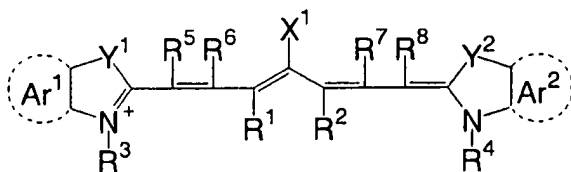
wherein in the general formula (2-B), Ar^{B} represents an aryl group containing at least one ~~substituent having an alkali-dissociating proton carboxyl group; the substituent having an alkali-dissociating proton is synonymous with the substituent having an alkali-dissociating proton in~~ the general formula (2); and M_1^+ is synonymous with M_1^+ in the general formula (2).

18. (original): The image forming material according to claim 11, wherein the onium salt represented by the general formula (2) does not exhibit substantially absorption between 500 nm and 600 nm.

19. (original): The image forming material according to claim 11, wherein the image forming material is a planographic printing plate precursor.

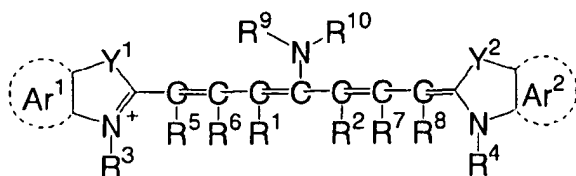
20. (previously presented): The image forming material according to claim 2, wherein general formula (A) is represented by one of the following general formulae (A-1), (A-2) and (A-3):

General Formula (A-1)



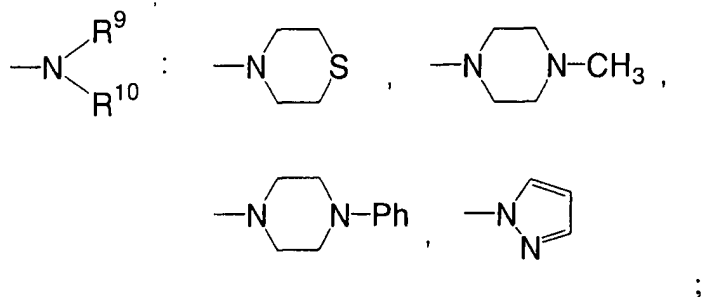
wherein X^1 represents a hydrogen atom or a halogen atom, R^1 and R^2 each independently represents a hydrocarbon group having from 1 to 12 carbon atoms, Ar^1 and Ar^2 may be the same or different and each represents an optionally substituted aromatic hydrocarbon group, Y^1 and Y^2 may be the same or different and each represent a sulfur atom or a dialkylmethylene group having not more than 12 carbon atoms, R^3 and R^4 may be the same or different and each represent an optionally substituted hydrocarbon group having 1 to 4 carbon atoms, R^5 , R^6 , R^7 and R^8 may be the same or different and each represent a hydrogen atom or a hydrocarbon group having not more than 12 carbon atoms;

General Formula (A-2)

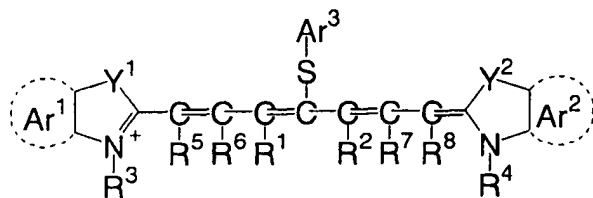


wherein R^1 and R^2 each independently represents a hydrogen atom or a hydrocarbon group having from 1 to 12 carbon atoms, and R^1 and R^2 may bond with each other to form a ring structure, Ar^1 and Ar^2 may be the same or different and each represent an optionally substituted aromatic hydrocarbon group, Y^1 and Y^2 may be the same or different and each represent a sulfur atom or a dialkylmethylene group having not more than 12 carbon atoms, R^3 and R^4 may be the same or different and each represent an optionally substituted hydrocarbon group having 1 to 4 carbon atoms, R^5 , R^6 , R^7 and R^8 may be the same or different and each represent a hydrogen atom or a hydrocarbon group having not more than 12 carbon atoms, R^9 and R^{10} may be the same or different and each represent an optionally substituted aromatic hydrocarbon group

having from 6 to 10 carbon atoms, an alkyl group having from 1 to 8 carbon atoms, or a hydrogen atom, or R^9 and R^{10} may bond with each other to form a ring having any one of the following structures:



General Formula (A-3):



wherein R^1 to R^8 , Ar^1 , Ar^2 , Y^1 , and Y^2 are respectively synonymous with those in the foregoing general formula (A-2), and Ar^3 represents an aromatic hydrocarbon group or a monocyclic or polycyclic heterocyclic group containing at least one of nitrogen, oxygen and sulfur atoms.